

# NUCLEAR REGULATORY COMMISSION WEATHER PROGRAMS

The United States Nuclear Regulatory Commission (NRC) licenses and regulates all nuclear facilities subject to the Atomic Energy Act of 1954 as amended. The licensing and operation of these nuclear facilities require the identification of meteorological and climatological conditions that can affect the safe operation of the facility, and that provide input to the assessment of the radiological impacts of any airborne releases from the facility.

Within the NRC, the Office of Nuclear Reactor Regulation and the Office of Nuclear Material Safety and Safeguards conducts reviews of facility siting, design, constructions, and operation of nuclear facilities. These reviews include consideration of mete-



Figure 3-NRC-1. Reactor vessels at the Calvert Cliffs, Maryland, nuclear power facilities. (BG&E photograph)

orological factors. The NRC Office for Analysis and Evaluation of Operational Data and the NRC Regional Offices assure that commitments by NRC applicants, permittees, and licensees are carried out. In addition, these offices also conduct NRC responses to nuclear facility emergencies. The Office of Nuclear Regulatory Research develops guides, criteria, and other standards related to the protection of public health and safety and the environment in the licensing and operation of nuclear facilities. This office also develops and conducts confirmatory research programs in support of activities of the other offices and in support of rule-making and standards activities.

The primary meteorological area in

which the NRC will have an interest during FY 2000 and beyond is improvements in the meteorological capabilities of the NRC and the operators of nuclear facilities to cope with emergencies involving the unplanned releases of radioactive materials. The NRC also maintains an interest in estimating the transport and dispersion of airborne radioactive materials for use in dose projections, and in the transport and dispersion of airborne, hazardous non-radioactive materials and their potential effects on the safe operation of nuclear facilities. In addition, the NRC maintains an interest in the effects of extreme and severe meteorological events on the safe operation of nuclear facilities.